

03-15-05

AF/IFW



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re the Application of:**

**David Duncan**

**Serial No.:** 10/687,014

**Filed:** October 16, 2003

**For:** TEXTURED WIRE TIE AND METHODS OF  
MAKING SAME

**Atty. Docket No.:** 06318.00001

**Group Art Unit:** 1774

**Examiner:** Jill M. Gray

**Confirmation No.:** 7409

**AMENDMENT AND RESPONSE TO  
OFFICE ACTION DATED DECEMBER 14, 2004**

Mail Stop AF  
Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Applicant submits the following response to the Office Action mailed on December 14, 2004. Please reconsider the application in light of the following amendment and remarks.

**Amendments to the Written Description** begin on page 2 of this paper.

**Amendments to the Claims** are reflected in the Listing of Claims, which begin on page 4 of this paper.

**Remarks/Arguments** begin on page 7 of this paper.

**Amendments to the Written Description**

The Applicant here corrects typographical errors in ¶¶ 27, 31, and 36.

[27] According to certain aspects, the melt blend may be applied to the wire, for example, by continuously applying as a liquid overcoating. Application of the coating may be accomplished, for example, utilizing known continuous coating processes and apparatuses. For example, the melt ~~bled~~ blend mixture, comprising a liquid mixture of from about 50% to about 70% by weight hot melt adhesive and colorant having a melt index from between about 14 to about 19 and from 30% to about 50% fractional melt resin having a melt index between about 0.3 to about 0.9, is applied directly from a liquid coating die to the wire at a liquid temperature of between 250°F to about 350°F as the wire is continuously drawn through the die. The coating die may be a pressure coating die, or the like. The die orifice and pressure of the liquid mixture in the die are adjusted to provide a liquid coating of approximately 0.005 to about 0.15 inch thick on the surface of the coated fiber, such that the diameter of the coated wire is approximately from about 0.045 to about 0.85 inches.

[31] The above example may also be made with a melt blend mixture, for example, of from about 60% by weight high hot melt adhesive and colorant having a melt index from between about 14 to about 19 and about 40% by weight fractional melt resin having a melt index between about 0.3 to about 0.9 at 310°F. The melt ~~bled~~ blend mixture can be made from any mixture of two plastic resins which are of differing molecular weight that a person of skill in the art having the benefit of this disclosure would find appropriate for a particular purpose.

[36] In reference to Fig. 4, another example of the method of making a textured wire tie is shown in a process diagram. A mixture of two polyvinyl chloride polymers of differing molecular weights, for example, a mixture of about 60% by weight hot melt adhesive and colorant having a melt index from between about 14 to about 19 and about 40% by weight fractional melt resin having a melt index between about 0.3 and 0.9, is heated to about 310°F and mixed in mixer 431 to form a melt blend. The melt blend is then passed from the mixer and fed into coating apparatus 426. The coating apparatus 426 applies the melt ~~blend~~ blend to the outer surface of wire 410. The coated wire 435 is then passed or drawn through cooling tube 440 and cooled. The cooled coated textured wire tie 440 is wound onto spool 455.